

W5YI REPORT

Up to the minute news from the world of amateur radio, personal computing and emerging electronics. While no guarantee is made, information is from sources we believe to be reliable. May be reproduced providing credit is given to The W5YI Report.

Dits & Bits

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and much, much more!

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July 1, 1987

"One of the fundamental purposes of amateur radio is to maintain a pool of operators, technicians and electronics experts. In light of the apparent downward trends in Novice operators, we are concerned that a valuable national resource is being diminished. Accordingly, we will propose rulemaking in the hope that an enhanced Novice license will benefit the service and reverse the trends."from FCC Notice of Proposed Rule Making - PR Docket 86-161, April 1986

Novice Ranks Expand Sharply!

We have just received the FCC licensing statistics for the month of May 1987. You are all aware that effective March 21, 1987, newcomers to the Amateur Radio Service are no longer restricted to just Morse Code operation. Thanks for Novice Enhancement, beginners can now operate in the voice mode in the ten meter (28.3-28.5 MHz) HF ham band ...also through VHF (222.1-223.91 MHz) and UHF (1270-1295 MHz) repeaters.

The information that the Commission has released clearly shows that there is indeed much interest among newcomers in a voice-class ham ticket. The government operates on a fiscal year that starts October 1st. Table 1 (on the next page) shows the number of new FCC Form 610 applications received by month for the last three years. Table 2 indicates the total number of Form 610's that the FCC processed through their licensing facility in Gettysburg, Pennsylvania, during the month of May for the last six years.

As you can see, the number of applications seeking to enter ham radio has skyrocketed to 10,314 for the 60 day period ending

May 31, 1987. By comparison, this figure was 3,418 for the same period in 1985...4,893 in 1986. Table 2 shows that the FCC processed a record number of applications this past May. More important, the current downtrend in Form 610 applications has been dramatically reversed! Ninety-three percent (6,567) of new applicant Form 610 applications processed during May 1987 entered Amateur Radio at the Novice level.

The only conclusion you can come to is that (1.) the public wants to communicate with one another and (2.) the FCC's Novice Enhancement proceeding is doing what was intended ...that being to interest newcomers in pursuing the ham radio hobby.

Ten years from now we should have a fine new crop of electronic engineers ...engineers that were influenced toward their profession by initial interest in Amateur Radio. Owen Garriott, W5LFL, the first amateur in space, acknowledges that he pursued electronics after first being introduced to Amateur Radio. We might even regain the supremacy in this area lost to off shore nations.

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Table 1.

APPLICATIONS FOR NEW AMATEUR LICENSE RECEIVED BY MONTH BY FCC (Source: FCC, Gettysburg, Pennsylvania)

Fiscal Year:	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Annual Total
1984-5	992	1,310	1,597	1,380	1,278	2,051	2,100	2,200	1,218	1,479	1,335	908	17,848
1985-6	1,413	1,074	2,579	1,501	1,889	1,676	2,826	1,017	2,067	2,899	1,406	1,619	21,956
1986-7	929	1,465	1,862	2,299	1,978	934	3,249	7,065 ★					*19,781

(* Through May 1987)

Table 2.

TOTAL APPLICATIONS PROCESSED BY FCC DURING APRIL/MAY BY YEAR

Includes all new, modified and renewed Form 610 applications.
(Source: FCC, Gettysburg, Pennsylvania)

	1982	1983	1984	1985	1986	1987
April	11,257	16,207	15,037	10,409	13,567	15,230
May	15,537	17,050	12,102	12,090	6,579	19,249
	26,794	33,257	27,139	22,499	20,146	34,479
Percent Increase:	+24.1%	-18.4%	-17.1%	-10.55%	+71.1% ★	

RADIO SHACK ENTERS AMATEUR RADIO

The Tandy Corporation, headquartered in Fort Worth - just a few miles from where we live, also has been watching the progress of the FCC's Novice Enhancement proceeding. They operate some 8,500 Radio Shack stores worldwide. Many Radio Shack employees are ham radio operators. Tandy did not consider the Amateur Radio market large enough for them with only an average of 1,500 new applicants joining the ham ranks monthly.

Last September, we received a note from their Vice President of Consumer Products Merchandising, Robert B. Miller. He had seen our advertisement in CQ magazine and ordered one of our Novice Packages. Bob wrote us "After 30 years of watching Amateur Radio, I have finally decided to take the plunge."

We sent him our package that contained various manuals, code key, oscillator, etc., - plus two of Gordon West's (WB6NOA) Morse code learning tapes. Bob obtained his Novice ticket shortly thereafter and was assigned KB5BXW. The Technician and General license (and call sign N5KLR) followed. Bob now holds an Advanced Class license and,

as of this writing, is awaiting a 2-by-2 format ham call sign.

Once it became apparent that the Commission would be approving Novice Enhancement, Bob arranged (through his book buyer, Leon R. Lutz, and Master Publishing, Inc. - a publisher that does many of Radio Shack's books) for Gordon and I to prepare a Novice package for the Radio Shack chain. We collaborated on the package which has now been completed. It should be available nationwide at Radio Shack about August 1st, (Item No. 62-2402, \$19.95 retail) and will immediately be the widest distributed amateur radio training manual of all time.

Gordo and I also arranged for us to have our own version of the package with our own book cover and binder which will be made available to amateur radio aspirants through mail order (\$19.95 from W5YI-VEC, P.O. Box #10101, Dallas, Texas 75207). Amateur radio dealers and classroom ham instructors can purchase multiple copies at a trade discount.

The self-study package is unlike any on the market today. The 300 page typewritten manuscript has been reduced to a fully

W5YI-VEC
P.O. Box 10101
Dallas, Texas 75207
We have developed a complete Novice Package that
includes a book, a binder, a tape, a CD, and a
Novice ticket. This package is designed to help you
get your Novice ticket quickly and easily. It includes
all the necessary information and instructions to
help you pass the Novice exam. The package is
available for purchase at a reasonable price.
The Novice package includes:
- A book containing all the necessary information
for the Novice exam.
- A binder to hold the book and other materials.
- A tape to help you learn Morse code.
- A CD to help you practice for the Novice exam.
- A Novice ticket to help you get started in amateur
radio. The Novice package is a great value and
will help you get your Novice ticket quickly and
easily. Order today!

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illustrated 112-page textbook covering the background of the Novice class from the early days through Novice Enhancement. An overview of the Amateur Radio Service is included. It is fully accurate and updated through the new 1987 Novice rules, questions and privileges.

Unlike most Novice license preparation manuals, The Novice Voice Class explains how testing has changed over the years and how it is conducted today ...even where to find volunteer examiners to conduct the needed 5 words-per-minute code examination and 30-question Element 2 theory exam. In addition to two included audio cassette tapes that teach the fun method of learning Morse code from ground zero, a chapter in the textbook coaches the correct way to learn the code.

Chapter 4, "Getting Ready for the Written Examination" prepares the applicant for the 30 question multiple-choice examination. All 302 possible questions, their multiple choices with the correct answer identified follow. After each question is a short explanation as to why the answer is correct. There is no long text to tediously search through to find the answer references.

Realizing that some General Class (and higher level) amateurs might not know how to administer the Novice examination, Chapter 5 "Taking the Novice Examination" advises both the applicant and VE alike on the proper procedure. A correctly completed FCC Form 610 Amateur Station/Operator application is pictured and a current blank application is included in the package.

The textbook can even be used by the VE's to administer the theory examination since the number of questions required from each sub-topic is indicated. A glossary of common CW abbreviations and amateur radio terms completes the textbook. The entire package is contained in a colorful shrink-wrapped cassette binder.

Radio Shack plans to advertise the amateur Novice Voice Class package in a Fall 1987 circular in full color. Some fifteen million will be circulated. In addition, the Novice Voice Class package will be promoted in their

big 1988 (40 million printed) Radio Shack catalog. It is mind-boggling to anticipate what this could do for Amateur Radio and the number of new Novices! Radio Shack's Bob Miller says he is shooting for two million amateurs!

We will just have to wait and see. It has been fun working on this project with Gordon West. His West Radio School, Inc., continues to develop more new Novice operators than any other in the country.

If you would like an advance copy of this package, just write us and we will reserve one for you. (Money back immediately if you are not satisfied.)

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AMATEUR RADIO CALL SIGNS....

issued as of the first of June.

Radio District	Gp. "A" Extra	Gp. "B" Adv.	Gp. "C" Tech/Gen	Gp. "D" Novice
0	NY0P	KE0OA	N0IBB	KB0ASP
1	NK1I	KC1EB	N1EXH	KA1QMW
2	NW2W	KE2AE	N2HFZ	KB2DVC
3	NG3V	KD3CR	N3FOG	KA3RUX
4 (†)	AB4BK	KK4NB	N4QFI	KC4APY
5 (†)	WZ5P	KF5YS	N5KSJ	KB5DRJ
6 (†)	AA6CP	KI6TM	N6PNJ	KB6SYY
7	WB7Z	KF7AS	N7JJJ	KB7CGM
8	NW8Y	KE8LX	N8IKG	KB8CRL
9	NS9O	KE9EN	N9GOF	KA9YZW
N.Mariana Is	AH0E	AH0AC	KH0AI	WH0AAG
Guam	KH2D	AH2BQ	KH2CN	WH2AKY
Johnston Is.	AH3A	AH3AC	KH3AB	WH3AAC
Midway Is.		AH4AA	KH4AD	WH4AAF
Palmyra/Jarvis	AH5A			
Hawaii	(*)	AH6HW	NH6JN	WH6BSS
Kure Is.			KH7AA	
Amer.Samoa	AH8C	AH8AC	KH8AD	WH8AAW
Wake Wilkes Peale		AH9AC	KH9AD	WH9AAF
Alaska	(*)	AL7IY	NL7KP	WL7BOZ
Virgin Is.	KP2S	KP2BE	NP2CC	WP2AFO
Puerto Rico	(*)	KP4NJ	WP4HO	WP4HEV

(NOTE: * = Puerto Rico has now run out of Group "A" call signs and joins Hawaii and Alaska where Group "B" (2-by-2 format) call signs are being issued to Extra Class amateurs. † = 2-by-1 format Group "A" call signs have run out in Radio District 4, 5 and 6. 2-by-2 Call signs from the AA-AL prefix block are being issued.)

SAME DAY SHIPPING! multiple-choice answer and tells you which answer is right! (one or each is only \$1.50 post paid)
 Be certain shipping right! (Complete Morse Code Course: 0-21 w.p.m.= \$29.95, ppd) PLUS Postage
 charges are included.)

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MAY VE PROGRAM STATISTICS....

	<u>May 1986</u>	<u>1987</u>
No. VEC's	*75	*59
No. Testing Sessions:	334	400
	<u>1986</u>	<u>1987</u>
ARRL	51.2%	45.3%
W5YI	16.6%	26.8%
DeVry	8.4%	8.0%
CAVEC	6.1%	6.3%
Others	17.7%	13.3%
Year-to-Date Sessions:	1,561	1,790
No. Elements Administered:	6,259	8,160
	<u>1986</u>	<u>1987</u>
ARRL	55.4%	50.4%
W5YI	13.5%	21.6%
DeVRY	6.9%	6.4%
CAVEC	5.1%	8.8%
Others	19.1%	12.8%
Year-to-Date Elements:	28,378	34,543
No. Applicants Tested:	4,366	4,931
	<u>1986</u>	<u>1987</u>
ARRL	55.0%	48.4%
W5YI	11.5%	22.1%
DeVRY	7.9%	6.5%
CAVEC	5.5%	3.5%
Others	20.1%	19.5%
Year-to-Date Applicants:	19,443	22,047
Pass/Upgrade Rate, All: (May 1985 = 57.9%)	60.4%	60.9%
Pass/Upgrade Rate, W5YI:	59.5%	59.4%
Applicants per Session:	13.1	12.3
Applicants per Session/W5YI:	13.1	12.1
No. Elements per Applicant:	1.4	1.7
No. Sessions per VEC:	4.5	6.8
Administrative Errors by VE's/VEC's		
Defective Applications:	.5%	.3%
Late Filed Sessions:	1.2%	2.0%
Defective Reports:	1.2%	.8%

(* = The FCC considers ARRL, W5YI and DeVRY as 13 separate VEC's since each conducts examinations in all 13 regions.)

[Source: FCC, Washington, D.C. 20554]

- The USSR and the United States now have news radio guns pointed at each other. Cuba has retaliated against the Reagan administration's Radio Marti broadcasts to that island nation by allowing 300 kw Radio Moscow broadcasts to the U.S. on the 1040 kHz AM dial from Cuba. The ITU is now involved.

- We have had several requests for the address of S.P. "Ted" Wilds, W4GVD, - the amateur that petitioned the FCC to restructure the amateur service to two license classes. (See last issue - Page #9 & 10.) Ted, whose address is simply: Pineola, NC 28662-0122 (no street address needed) said he would be happy to send a copy of his petition to anyone that sends him a business-sized SASE.

- While on the subject of petitions, many W5YI Report readers have forwarded comments to the FCC on "Rules to Permit Volunteer Examiners Conducting the Novice Operator Examination to Authorize Immediate Operation if the Examinee Passes the Examination" — the so-called "Instant Novice" petition, RM-5924. (See Page 3 of our June 1st newsletter.) The FCC sent out a News Bulletin on June 25, 1987, acknowledging comments from: R. K. Adams, Leon Lewis, Chester M. Gregory, Bill Anderson, and Larry Garens.

- In the same June 25th FCC Bulletin was a partial list of commenters on "Rules Concerning Input Selector Switches Used in Conjunction with Cable Television Service". This has to do with the technical guidelines for the so-called "A/B" switch that allows a TV viewer to switch from cable hookup to an outside antenna once the "must carry" rules are discontinued. At present, cable operators are required to carry all local television stations on their cable lineup. The ARRL was one of the many firms commenting on this proceeding.

The League opposes the proposed A/B switch 60 dB isolation standards which would be less stringent than those currently in effect for Part 76 cable operation. The FCC wants to apply the less stringent Part 15 interference guidelines. The ARRL asks for no less than 90 dB of isolation between the cable input connection and the antenna input. They contend this is easily attainable and the switches are available in the marketplace. "The League cannot tolerate the blame wrongfully assessed by cable subscribers against amateur VHF and UHF users whose signals penetrate cable terminal equipment poorly designed to reject external RF," Chris Imlay, N3AKD, ARRL counsel wrote. (Comments filed June 10th.)

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FCC BUREAU CHIEF GOES TO WHITE HOUSE

One of the FCC's finest administrators is leaving the Commission. Twenty-four year FCC veteran, James Clayton McKinney has been named Deputy Assistant to the President and Director of the White House Military Office. He assumes his new duties on July 1st. FCC Chairman Dennis R. Patrick accepted Jim's resignation with great regret on June 16th.

McKinney served as Chief of the Private Radio Bureau from 1981 to 1983. His office was very instrumental in quarterbacking the changeover from FCC to volunteer Amateur Radio testing which was brought about in 1982 when President Reagan signed legislation authorizing the VE program. Prior to 1981, McKinney, an Electronics Engineer, was Chief of the Field Operations Bureau overseeing the Commission's extensive district offices.

Most recently, Jim was Chief of the Mass Media Bureau. It was he that came up with the speech guidelines defining indecency for commercial (and amateur) radio stations. He was one never to withdraw from controversy or difficult issues. Jim will long be remembered for his efforts that revitalized AM radio and his contributions to the standardization of stereo TV.

McKinney, an instrument rated pilot, will be in charge of Air Force One, the president's personal plane. He also will be responsible for the president's limousines, Camp David, the White House dining facility, presidential telecommunications, maintaining internal computer and communications services between the armed services and the White House ...and about 1,600 personnel. His salary will be \$82,500.

McKinney was recruited by Rhett Dawson, White House Chief of Operations - who also happens to be the husband of FCC Commissioner Mimi Dawson. Mimi was well aware of McKinney's ability and undoubtedly put in a good word for him. During his 24 years of FCC service, McKinney received a continuing series of management awards, including the Presidential Rank Award for

Distinguished Executive Service in 1985. In 1987 he was awarded the Commission's Gold Medal for Distinguished Service. McKinney will probably be a key candidate for FCC Commissioner once President Reagan's term of office is over.

● Don't be surprised if you have to pay an additional \$2 hourly charge for accessing CompuServe or The Source information service via your home computer. The FCC believes that everybody who uses a local telephone exchange for interstate service should help pay for it. Latest information is that the charge may be "phased in" starting January 1988. The rationale behind the new on-line access service charges is that MCI and Sprint now pay an access charge to hook their long distance service to local phone lines. Information providers are very concerned about the possibility and are campaigning to block the FCC proposal. At present, information-retrieval systems are exempt from access charges.

THE HANDS, ELECTRONIC MUSIC INVENTION

Michel Waisvisz, the son of a Dutch ham radio operator, stole the show at a recent Los Angeles concert staged at the Audio Engineering Society's International Conference on Music.

Waisvisz demonstrated a digital-synthesizer controller he invented that consists of two aluminum-frame mittens. He calls his music instrument "The Hands." Inside each are 12 keys - one of each of the 12 notes in an octave - and four mercury switches that can sense eight positions in space. Each position indicates a different octave. The "gloves" give Waisvisz a range of eight complete octaves - more than a piano. A sonar ranging device actuated by differences in distance between the hands controls 127 different sound intensities and quality.

Michel, who built the device at Stein, an electronic music center in Amsterdam, will next demonstrate the digital music device at a concert scheduled for December 12 at the Fine Arts Theater in San Francisco. Samples of Waisvisz's music is available on compact disc from: MIT Press, 28 Carleton St., Cambridge, Mass 02142.

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TEST DESIGN BY VOLUNTEER EXAMINERS...

It appears to be a well kept secret, but volunteer examiners - as well as VEC's - can now design ALL written amateur radio operator tests. That is, VE teams are now authorized to make up the theory examinations (although they may still accept test designs from their VEC should they elect to do so.) Up until fairly recently, only Novice examinations could be designed by the VE team.

New §Part 97.27(b) specifies "Each examination administered for the Technician, General, Advanced or Amateur Extra operator license shall be prepared by the administering volunteer examiners according to instructions from their coordinating VEC, or obtained by the administering volunteer examiners from the coordinating VEC that accredited them."

This rule superceded §Part 97.27(d) which stated "Elements 3, 4(A) and 4(B) will be designed by the VEC." Rules allowing Novice (Element 2) examinations to be designed by the VE have been in effect for some time.

VE's that want to prepare their own examinations should contact their VEC. Originally the FCC contemplated that different VEC's might have not only different pool questions - but different amounts of questions in each of the pools so the FCC specified the percentages of questions that were to be asked from each subelement.

Since then, however, the FCC has mandated that all VEC's must agree on a single question pool so every VEC selects the same number of questions from each of the nine topics. These subelements are:

Subelement	Description:
A	Rules and Regulations
B	Operating Procedures
C	Radio Wave Propagation
D	Amateur Radio Practice
E	Electrical Principles
F	Circuit Components
G	Practical Circuits
H	Signals and Emissions
I	Antennas and Feedlines

TEST DESIGN FOR ALL WRITTEN TESTS

Element	2*	3A	3B	4A	4B
		Novice	Tech.	General	Advan.
A	9	5	4	6	8
B	2	3	3	1	2
C	2	3	3	2	1
D	4	4	5	4	3
E	4	2	2	10	7
F	2	2	1	6	5
G	2	1	1	10	6
H	2	2	2	6	3
I	3	3	4	5	5
Total:	30	25	25	50	40

(NOTE: * = In the case of the Novice examination, the subelements are broken down into smaller groups so that the questions cover a broader range of subject matter. This is desirable and suggested, but not mandated in the Rules. Oral examinations are permissible.)

While we can't speak for other VEC's, we do allow our VE teams to make up their own examinations should they desire to. A side advantage is increased security against possible disclosure of existing VEC test designs. All VE teams need do is be certain that they conform to the proper test design "recipe" indicated above.

● The FCC has ruled that scrambling is an acceptable means by which adult sexually-oriented message providers may restrict access to their services by minors. The Commission further directed AT&T to submit complete technical specifications of a demonstration scrambler and descrambler it had designed. AT&T submitted the material on May 19th and the FCC now wants the technique to become a uniform scrambling standard employed by all adult message providers.

● Wide screen television with the quality of 35-mm motion pictures and digital stereophonic sound equal to a compact disc's will probably be available within the next three years. High definition TV requires a bandwidth in excess of that presently authorized to broadcasters. Cable, VCR/video disc and DBS (Direct Broadcast Satellite) systems all have sufficient bandwidth to provide high-definition

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signals. The Japanese HDTV broadcast system is not compatible with today's television transmitting and receiving equipment. An alternative approach is a system being developed that uses $1\frac{1}{2}$ TV channels. Existing sets could receive the picture as they do now and new ones capable of receiving the higher resolution picture would get the better signal. The situation resembles that which prevailed when color television was introduced. Black-and-white sets could (and still do) receive the color transmissions but in black-and-white.

- The International Summer Consumer Electronics Show (CES) which concluded its four day run on June 2nd, attracted over 100,000 trade attendees who flocked to Chicago to review the newest electronic products. High-resolution VCR's, compact disc video (CDV), digital audio tape (DAT) recorders and dual-deck VCR's were among the thousands of new product introductions. Music and motion picture companies seem dead set against allowing DAT audio and dual deck video recorders. They are worried about illegal duplication of audio and video tapes but Congress is reluctant to change the copyright law as a means of addressing problems created by technological advances.

- Another Bell operating company is getting into the wireline CQ business. Illinois Bell Telephone has introduced GAB (Group Access Bridge) conversation service for teenagers last week. Similar to "Talkabout", that has operated in Britain for four years, callers are connected with up to nine other teens - plus an on-line conversation moderator (chaperone?) "to ensure fun and quality."

- Matsushita (Panasonic) will start marketing three models of flat ku-band satellite antennas this fall. They weigh only five pounds and are about the size of a checkerboard. The antennas are the result of a joint venture between COMSAT technology and Matsushita design. It will be two or three years before ku band DBS programming is available. Then, TV over-the-air, cable and DBS broadcasters will all be fighting for a share of the video market.

- Gerald Robert of Star TV, Hartford, Connecticut, has been given a one year

suspended sentence, a \$5,000 fine and ordered to perform 1,000 hours of community service for illegally modifying addressable Jerrold cable-TV decoders. Robert, who was tracked down by the FBI, replaced the decoder's microchips at a price of \$50 each. Supposedly the chips were only available to cable operators

- IBM has stopped taking orders for their PC-XT (and has reduced the price of their XT-286 from \$2,810 to \$2,495) as they begin to place emphasis on their new PS/2 line of micro computers. Zenith has introduced a new 14 inch perfectly flat screen CRT monitor with less glare than conventional curved screens.

- A solar powered clock kept on time by AM signals from a built-in radio tuned to a West German atomic time standard loses only one second every 150,000 years! Retail is \$20,000. West German company, Junghans Uhren, builds only one RCS-1 (for radio controlled solar) clock a month.

- Brian W. Treadwell, WV4V, is combining his experience as a well travelled international banker, a stamp collector of some 40 years and avid DXer/DX-QSL manager into a new venture called DX-QSL Associates. He will offer three services, (1.) DX QSL tips and a list of countries in which local citizens are permitted to receive "green stamps" in the mail, (2.) Foreign postage stamps for use on self-addressed envelopes and (3.) QSL supplies ...such as European-sized airmail envelopes. (434 Blair Road N.W., Vienna, VA 22180 - 703-938-1442.)

- TRW has developed integrated circuit chips that repair themselves! The computer chips are manufactured with spare parts that automatically replace malfunctioning components.

- An inexpensive (under \$1,000) Thumb-Scan electronic fingerprint verification device has been developed to protect personal computers from unauthorized access. System uses software to match user's thumb print with image that has been encrypted before storage. Thumbscan was developed for users with sensitive data such as government agencies.

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- We received some rather interesting (and official looking) information on the "Russian Woodpecker". Apparently it consists of three large over-the-horizon back-scatter (OTH-B) radar systems. One near Nikolayevsk-na-Amure in the extreme eastern Soviet Union, another near Gomel, about 175 miles southeast of Minsk and a third near Nikolayevsk in the Causasus Mountains. The first two are directed at U.S. ICBM fields and could provide 30 minutes warning of an ICBM strike launched from the U.S. They also can detect U.S. planes. The third OTH-B radar system is directed southeast to provide warning of a Chinese ICBM strike. The transmissions are extremely powerful - 20 to 40 megawatts or more - and range across the HF band from 4 to about 27 MHz, depending upon ionospheric conditions. At dawn they generally occur at about 14 MHz or below. They appear to center around 14.215 MHz in the amateur 20 meter ham band. The signals move up and down the 4 to 27 MHz spectrum in 10 kHz steps at intervals of 30 seconds to 10 minutes. The bandwidth varies from 30 kHz to more than 300 kHz. The "Woodpecker" has a basic pulse repetition frequency (PRF) of 10 per second.

- Regency Electronics has re-entered the CB market. Their new fully synthesized Informer CB-1 (\$69.95) and CB-2 (\$159.95) models complement Regency's new line of Informer radar detectors.

- Amateur radio got some good publicity in the June 1987 issue of National Geographic magazine. An article entitled "Tornado!" mentions Amateur Radio in reference to storm warnings. (Page 175)

- Heathkit has a new Multi Mode Terminal Node Controller, the HK-232 Pack-Kit. Runs CW/AMTOR/ASCII/HF & VHF Packet. Also, available in August will be a new Heathkit SB-1000 Linear Amplifier covering 160 to 15 meters. Both are in kit form.

- Bill Duval, K5UGM, Irving, Texas, says he completed the first ever 220-MHz Sporadic-E contact. He QSD'd with W5HUQ/4 in Jacksonville, Florida, on June 14. Distance: 916 miles. The contact was on CW, but SSB was also copied both ways, Bill said.

- The 1986 ARRL Handbook for the Radio Amateur has been translated into Spanish by Boixareu Editores of Barcelona, Spain. All 1,264 pages of text, 1,894 captions to photographs and illustrations and the entire index had to be translated. The Manual ARRL 1986 Para el Radioaficionado is now available from the ARRL (225 Main St., Newington, CT 06111.) Retail is \$74.00 for the short run.

- Richard A. Gardner, of Milwaukee, has been found guilty on two counts of cable piracy under the Cable Communications Policy Act of 1984. He was convicted of distributing pirate decoders that saved buyers \$78 a month in subscription fees. He faces two years in jail and \$50,000 in fines. He will be sentenced July 14th. Gardner purchased Sylvania converter/decoders and modified them to descramble Pay TV services.

- The Home Shopping Network is going into the financial, drug and travel business. HSN will offer over 150 financial products - including loans, insurance, banking and credit card service. Discount prescriptions will be shipped through the mail and HSN is negotiating with airlines and cruise ships to provide travel services. HSN reaches 40 million homes.

- Want your VCR to record a television program at a particular time? Future printed TV program listings may contain bar codes that have the capability to program Video Cassette Recorders to the show advertised. Panasonic has developed a VCR that can read instructions from supermarket style bar codes. The unit is already on sale in Japan. A handheld infrared scanner transmits the programming data to the VCR. U.S. publishers (including TV Guide) are generally opposed to the idea. VCR manufacturers say they will print their own bar code programming instructions. Other VCR makers are also taking a high-tech approach to programming. Sharp has a display that prompts users through programming with "date", "time", etc. A Sanyo VCR is programmed with by touching a fiber-optics pen to graphics on the television screen!

- Sony is introducing a \$2.99 3-inch Compact Disc that contains 20 minutes of recorded pop music as an alternative to the standard 8 minute 7-inch vinyl "single."

1 Ea.	Test Manual:	N	1	Holding Amateur Radio Operator Classes?
\$1.00	Test Manual:	N	1	1
\$2.00	Test Manual:	N	1	1
\$3.00	Test Manual:	N	1	1
\$4.00	Test Manual:	N	1	1
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\$92.00	Test Manual:	N	1	1
\$93.00	Test Manual:	N	1	1
\$94.00	Test Manual:	N	1	1
\$95.00	Test Manual:	N	1	1
\$96.00	Test Manual:	N	1	1
\$97.00	Test Manual:	N	1	1
\$98.00	Test Manual:	N	1	1
\$99.00	Test Manual:	N	1	1
\$100.00	Test Manual:	N	1	1

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- To commemorate the 120th Anniversary of the Confederation, Canadian amateurs will be using the following special prefixes on July 1, 1987 only. CG1 in the Yukon, CZ1 and CZ2 in Newfoundland and Labrador and CK1 through CK8 in the remainder of Canada.
- CRRL News advises that Leonid Labutin, UA3CR, a well-known polar explorer will be with a group of Soviet and Canadian scientists crossing the North Pole on skis next February. Leo will carry a 10-watt transceiver for the 80, 40 and 20 meter bands, and possibly some equipment for communicating through the OSCAR satellites. A number of Canadian amateurs, including several VE8's, have been lined up to keep in touch with Leo.
- Sony has announced a line of light weight personal 8-mm video components. Sony will market an 11 pound 8-mm portable VCR with built in 5-in. high resolution color TV. Next year it plans to release a 3.3-pound handheld 8-mm VCR featuring a 2.7" color LCD television. A palm size 7-oz color electronic camera will be released late this year.
- The 1988 Summer Olympic Games from Seoul, Korea, will be broadcast in stereo for the first time and feature enhanced 3-D graphics animation explaining each sport. More than 800 NBC technicians will spend the first six months of 1988 in Seoul preparing. Network is very concerned about "disruptions."
- General Dynamics senior programmer Ross Wheelwright, N5IHN, has developed ham radio software that allows control of Kenwood IC-10 microchip-equipped radios and Kantronics KAM (CW/ASCII/AMTOR/Packet) terminal units from the serial port of an IBM compatible PC. Expert Edge integrates a split screen terminal, radio control and QSO program with multiple windows and pop-up menus into a single system. The \$150 program is written in IBM assembly language. Program will eventually support AEA's PK-232. (Phone: 817-246-7410)
- America's first nationwide paging service gets underway July 1st. SkyPager will provide business travellers with messages in every major metropolitan area in the continental United States. The caller dials a toll-

free telephone number and uses a touch-tone phone to enter the personal ID number (PIN) of the traveler's SkyPager. The information (beeper tone or numeric display message) is uplinked in California and downlinked in each of the network cities. Additional information from (202) 223-2780.

- Laptop, notebook and portable computers will drop to half their present price by 1990 says Market Intelligence Research Company. Their \$995 report says laptops will account for 80% of the small computer market and portables, as such, will disappear.
- The state of Michigan is trying to incorporate an anti-radar detector provision to a bill raising the speed limit to 65 mph on federal highways in rural areas. Proposed bill would impose a 90-day jail sentence and \$1,000 fine for using the product. Radar detector bans have been previously defeated in Michigan in 1982, 1983 and 1984.
- Daniel Brandt, KM6E, of Arlington, Virginia, has been interested in U.S. foreign policy and active in the anti-war movement since the early 1960's. Over the last 15 years he has compiled a very unusual database of over 29,000 groups and individuals involved in U.S. and foreign intelligence, espionage, right wing, domestic surveillance, assassination theory and international affairs. The database is used as an aid to investigative journalism. Brandt has sold over 200 copies at up to \$100 per copy ... "many to journalists you would recognize." The special search software and database are not copy protected and periodic updates are available. (703-241-5437)

RADIO CLUB OF AMERICA MEMBERSHIP....

Your author, Fred Maia - W5YI, has been nominated and elected a member of the prestigious Radio Club of America. The New York City based organization is nation's oldest communications society - Founded in 1909.

It's membership is made up primarily of those in the radio communications field and many prominent amateurs are on its rolls. ARRL's Dave Sumner/K1ZZ, Perry Williams/W1UED, Directors Frank Butler/W4RH, Steve

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Mendelsohn/WA2DHF are members ...as is ex-ARRL President Harry Dannals/W2HD. Other noted amateurs are QCWA General Manager L. Heithecker/W5EJ, QCWA President Leland Smith/W5KL (whom I didn't know was a retired U.S. Marine Brigadier General), DXers Lloyd/W6KG and Iris/W6QL Colvin, Gordon West/WB6NOA, Barry Goldwater/K7UGA and the late Arthur Collins/W0CXX. Even Edwin H. Armstrong, inventor of frequency modulation, was an RCA member. We also note ex-FCC Private Radio Bureau Chief Bob Foosaner in the membership list.

Radio Club of America by-laws require three or more individually submitted written RCA sponsors. I am deeply honored to have been recommended and accepted for membership.

STATE PUC ACTS ON CARPHONE PRIVACY

The California Public Utilities Commission has made a decision for California that the FCC has been contemplating for the entire nation ...that being whether or not to implement procedures alerting consumers that cellular radio telephone calls should not be considered totally private.

After a significant investigation, the California Public Utilities Commission has concluded that cellular phone calls may indeed not be private. Cellular telephone companies operating in that state will now be required to provide warning stickers to place on cellular telephones reminding the user that the mobile radiotelephone calls may not be confidential. This is a major victory for those trying to point out that cellular radio calls can easily be intercepted by receiving scanners and some older model television sets from as far away as ten miles.

The PUC circulated a Commission Order last week directing cellular telephone utilities to alert new subscribers prior to service about the potential lack of cellular telephone privacy. The ruling, which has the effect of law, directs the utilities to provide a sticker to attach to the telephone with the phrase, "Conversations with a cellular telephone may not be private."

The Commission ruling is the result of an investigation that began in December 1986 into the problem of cellular telephone conversations being overheard by others. Specifically, the Commission responding to legislation, set out to determine the feasibility of a cellular call notification system — such as a periodic beep tone. Such a system would indicate to the person called from a cellular car phone that (1.) the call is from a mobile telephone and (2.) that the conversation may not be totally private.

Two parallel phases made up the Commission investigation ...determining how mobile exchange customers felt about a proposed automatic notification system and the costs to cellular carriers to implement such a system. All major California cellular firms participated in the study.

During its investigation, the PUC learned that of the cellular customers surveyed, 60% were unaware of the potential loss of privacy of cellular originated calls. The survey also showed that 38% had a high level of concern for privacy.

Although the PUC decided not to implement an automatic cellular notification system, the Commission remained concerned about the lack of awareness among telephone users of the privacy issue. Consequently the Commission is requiring all local exchange companies and cellular telephone utilities to include a bill insert in the next available billing cycle stating in plain language the nature of cellular technology, the potential lack of privacy in conversations with a cellular telephone and methods available to reduce the risk of interception such as scrambling devices.

Needless to say, California cellular companies are very upset with the PUC ruling since it will dull the current attractiveness of a carphone. They are considering legally protesting the state's authority to require labelling and customer notification. The California PUC, however, is a very powerful consumer advocate. Traditionally they have been more concerned with the welfare of the public than with industry. The decision probably will not be overturned.